

## CHECKLIST ENVIRONMENTAL ASSESSMENT

**Proposed Action:** Approve Drilling Permit (Form 22)

**Project/Well Name:** Corsair Dry Creek Storage 2-3

**Operator:** Northwestern Corporation

**Location:** NW NE Section 3 T7S R21E

**County:** Carbon MT; **Field (or Wildcat):** Wildcat

**Proposed Project Date:** 6/22/2023

### I. DESCRIPTION OF ACTION

Northwestern Corporation plans to drill a horizontal well for gas storage in the 3<sup>rd</sup> Frontier to 7,500' MD / 4,457' TVD.

### II. PROJECT DEVELOPMENT

#### 1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS, OR INDIVIDUALS CONTACTED

Montana Bureau of Mines and Geology, GWIC website (Carbon County Wells).

US Fish and Wildlife, Region 6 website

ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES MONTANA COUNTIES, Carbon County

Montana Natural Heritage Program Website (FWP)

Heritage State Rank= S1, S2, S3, T7S R21E

Montana Cadastral Website

Surface Ownership and surface use Section 3 T7S R21E

Montana Department of Natural Resources MEPA Submittal

#### 2. ALTERNATIVES CONSIDERED

No Action Alternative: The proposed well would not be drilled.

Action Alternative: Northwestern Corporation would have permission to drill the well.

### III. IMPACTS ON THE PHYSICAL ENVIRONMENT

#### 3. AIR QUALITY

Long drilling time: No, 3-4 days drilling time.

Unusually deep drilling (high horsepower rig): No, drilling rig for a 7,500' MD / 4,457' TVD well in the 3<sup>rd</sup> Frontier.

Possible H<sub>2</sub>S gas production: No

In/near Class I air quality area: No.

Air quality permit for flaring/venting (if productive): NA, this is going to be a gas storage well.

Comments: No special concerns – using rig to drill well to 7,500' MD / 4,457' TVD.

#### 4. WATER QUALITY

Salt/oil-based mud: Freshwater based mud will be used on all sections of hole.

High water table: No high-water table anticipated at this location.

Surface drainage leads to live water: No, an unnamed ephemeral drainage is located about 1/5 of a mile to the east and 1/10 of a mile to the southwest from the proposed location.

Water well contamination: No. Nearest water well is a domestic water well with a depth of 250' located about 3/10 of a mile to the northwest. Another domestic water well with a depth of 205' is located about 1/2 of a mile to the northwest from the proposed location. Another domestic water well with a depth of 165' is located about 2/5 of a mile to the northwest. A stockwater well with a depth of 270' is located about 3/10 of a mile to the north.

Porous/permeable soils: No, sandy clay.

Class I stream drainage: No.

Groundwater vulnerability area: No.

Mitigation:

☐ Lined reserve pit:

☒ Adequate surface casing

☐ Berms/dykes, re-routed drainage

☒ Closed mud system

☒ Off-site disposal of solids/liquids (in approved facility)

Comments: Steel surface casing to be set at 450' and cemented to surface to protect ground water. (Rule 36.22.1001).

#### 5. SOILS/VEGETATION/LAND USE

Vegetation: Grass land.

Stream crossings: Ephemeral drainages.

High erosion potential: No, a small cut of 9.1' and a small fill of 3.6' is required.

Loss of soil productivity: None, location to be restored after drilling well, if well is nonproductive.

Unusually large wellsite (Describe dimensions): No, 400' X 300'.

Damage to improvements: Slight, surface use is for grazing.

Conflict with existing land use/values: Slight

Mitigation

- ☐ Avoid improvements (topographic tolerance)
- ☐ Exception location requested
- ☒ Stockpile topsoil
- ☐ Stream Crossing Permit (other agency review)
- ☐ Reclaim unused part of wellsite if productive
- ☐ Special construction methods to enhance reclamation

Access Road: Access will be off North Dry Creek Rd and Mpc Pump Station Rd.

Drilling fluids/solids: Cuttings will be dried on location and hauled to the Billings, Montana landfill.

<b>6. HEALTH HAZARDS/NOISE</b>
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Proximity to public facilities/residences: No residences within a ½ mile radius.

Possibility of H2S: No.

In/near Class I air quality area: No.

Size of rig/length of drilling time: 3-4 days drilling time.

Mitigation:

- ☒ Proper BOP equipment.
- ☐ Topographic sound barriers
- ☐ H2S contingency and/or evacuation plan
- ☐ Special equipment/procedures requirements
- ☐ Other:

<b>7. WILDLIFE/RECREATION</b>
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Sage Grouse: In core area, program analysis received on 5/15/2023.

Proximity to sensitive wildlife areas (DFWP identified): None.

Proximity to recreation sites: None.

Creation of new access to wildlife habitat: None.

Conflict with game range/refuge management: None.

Threatened or endangered Species: Species identified as threatened or endangered in Carbon County are the Grizzly Bear, Canada Lynx, Black-footed Ferret, Yellow-billed Cuckoo, Monarch Butterfly, Western Glacier Stonefly, and the Whitebark Pine. MTFWP Natural Heritage Tracker website lists six (6) species of concern: Grizzly Bear, Hoary Bat, Golden Eagle, Great Blue Heron, Greater Sage-Grouse, and Pinyon Jay.

Mitigation:

- ☐ Avoidance (topographic tolerance/exception)
- ☐ Other agency review (DFWP, federal agencies, DNRC Trust Lands, Sage Grouse Habitat Conservation Program)
- ☐ Screening/fencing of pits, drillsite
- ☐ Other:

Comments: Private surface lands. There may be species of concern that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to what he would like done if a species of concern is discovered at this location. The Board of Oil & Gas has no jurisdiction over private surface lands. No concerns.

#### IV. IMPACTS ON THE HUMAN POPULATION

##### 8. HISTORICAL/CULTURAL/PALEONTOLOGICAL

Proximity to known sites: None.

Mitigation

☐ avoidance (topographic tolerance, location exception)

☐ other agency review (SHPO, DNRC Trust Lands, federal agencies)

Other:

##### 9. SOCIAL/ECONOMIC

Substantial effect on tax base

☐ Create demand for new governmental services

☐ Population increase or relocation

Comments: No concerns.

#### IV. SUMMARY

No long term impacts expected. Some short term impacts will occur, but can be mitigated.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

**EA Checklist  
Prepared By:**

**Name:** John Gizicki

**Date:** 6/5/23

**Title:** Chief Field Inspector